

choline dehydrogenase

Cat. No. EXWM-0443

Lot. No. (See product label)

Introduction

Description

A quinoprotein. In many bacteria, plants and animals, the osmoprotectant betaine is synthesized using different enzymes to catalyse the conversion of (1) choline into betaine aldehyde and (2) betaine aldehyde into betaine. In plants, the first reaction is catalysed by EC 1.14.15.7, choline monooxygenase, whereas in animals and many bacteria, it is catalysed by either membrane-bound choline dehydrogenase (EC 1.1.99.1) or soluble choline oxidase (EC 1.1.3.17). The enzyme involved in the second step, EC 1.2.1.8, betaine-aldehyde dehydrogenase, appears to be the same in plants, animals and bacteria.

Synonyms

choline oxidase; choline-cytochrome c reductase; choline:(acceptor) oxidoreductase; choline:(acceptor) 1-oxidoreductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.1.99.1

CAS No.

9028-67-5

Reaction

choline + acceptor = betaine aldehyde + reduced acceptor

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.